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An illustrated key for identifying African Saginae (Saltatoria: Tettigoniidae)

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SYNOPSIS

A key is given for identification of genera and species of African Saginae. Additional notes contain synonyms, measurements and geographical distribution of all species.

The katydids which comprise the subfamily Saginae are the recent representatives of a probably very ancient group of the Tettigonioidea. They are frequently large or very large insects, well characterized by their more or less elongate body, their basally stout antennae which do not extend much beyond the end of abdomen, their long, ventrally-spined legs, and the absence of dorsal spines on the femora and tibiae. As far as is known, all members of this subfamily are restricted to open habitats such as steppe, bushveld and savanna. They avoid tropical rain forest and true desert; nevertheless some species have adapted ecologically to semiarid conditions.

We know very little regarding the biology of the African genera of Saginae. They seem to be mainly nocturnal and exclusively carnivorous animals, like the genus *Saga* in Southern Europe and Western Asia. In general, entomological collections rarely contain many specimens of Saginae because, due to their nocturnal habits and their good colour adaptation to the surrounding vegetation, they are not found very frequently. Notwithstanding this fact, no species of the subfamily is known to be really common.

The present key was based on the third part of a monograph of the Saginae of world, prepared by the author.* For detailed descriptions, full synonymy and distributional notes concerning the revised genera and species, that paper should be consulted. It also may be helpful in identifying questionable specimens which are difficult to determine by the following keys only.

The author is much indebted to the keepers of a considerable number of public entomological collections in southern Africa and in Europe for entrusting him their material for study. This material made possible biometric measurements of more than 500 specimens of African Saginae. I wish to express my grateful thanks to Prof P. Basilewsky (Musée Royal de l'Afrique Centrale, Tervuren), Dr H. D. Brown (Plant Protection Research Institute, Pretoria), Dr M. Donskoff (Muséum National d'Histoire Naturelle, Paris), Dr K. K. Günther (Museum für Naturkunde, Berlin), Dr A. J. Hesse (South African Museum, Cape Town), Dr J. Huxley (British Museum [N.H.] London), Mr S. W. L. de

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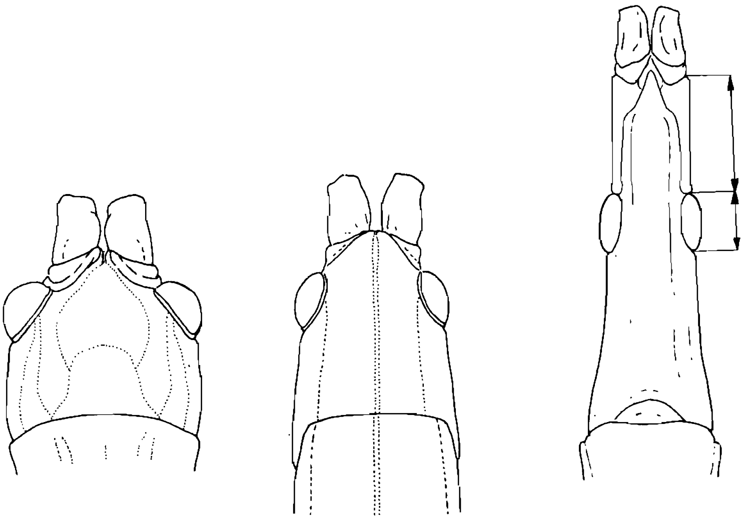
* *Beitr. Ent. Berlin* **21**; 405–478; 1971.

Kock (Transvaal Museum, Pretoria), Dr E. Pinhey (National Museum, Bulawayo), Dr B. R. Stuckenberg (Natal Museum, Pietermaritzburg) and Prof. Dr H. Weidner (Zoologisches Museum, Hamburg).

Further, I wish to thank all colleagues who favoured my work by sending specimens of Saginae for study and who are not mentioned here.

KEY TO THE GENERA

1. Vertex in front of the eyes not (fig. 1) or only somewhat (fig. 2) elongated. Prosternum bispinose 2
— Vertex strongly elongate (fig. 3). Prosternum unarmed (rarely with two short conical pegs). Wings strongly abbreviated or rudimentary .. .. 3. **Peringueyella** Saussure
2. Wings fully developed or abbreviated. Fore and middle tibiae armed below with two rows of 6 spines .. .. 1. **Clonia** Stål
— Wings greatly reduced (about as long as the pronotum) in ♂, rudimentary (not more as the half as the length of the pronotum) in ♀. Fore and middle tibiae armed below with two rows of at least 8 spines .. .. 2. **Cloniella** Kaltenbach



Figs. 1–3. Head (dorsal view) of (1) *Clonia* sp.; (2) *Cloniella* sp.; (3) *Peringueyella* sp.

1. Genus *Clonia* Stål 1855

Key to the subgenera of *Clonia* Stål

1. Anal area of hind wings spotted with narrower or broader dark-brown concentric pattern. Slender species. Hind femur rather constantly more than 4,2 times the length of the pronotum 2

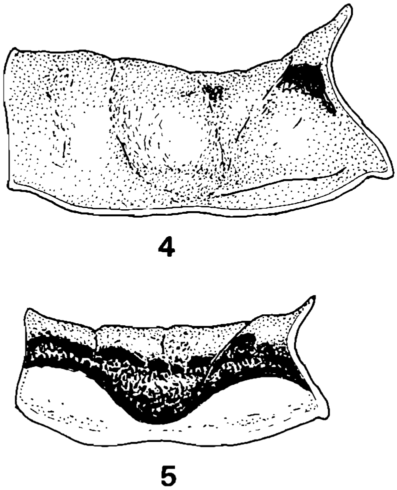
— Anal area of hind wings entirely dark-brown to black-brown (rarely with shiny pattern). More robustly built, short-winged species. Hind femur in most specimens less than 4,2 times the length of the pronotum .. .. .. 1.4. **Hemiclonia** Kirby

2. Hind wings whitish around the dark-brown pattern 3

— Hind wings brownish-yellow around the rather small dark-brown pattern. Short-winged species .. .. 1.3. **Xanthoclonia** Kaltenbach

3. Suture of the paranota of pronotum straight or only in the hind part slightly curved (fig. 4) .. .. 1.1. **Clonia** Stål

— Suture of the paranota of pronotum strongly bisinuate (fig. 5) 1.2. **Leptoclonia** Kaltenbach



Figs. 4–5. Pronotum (lateral view) of (4) *Clonia* (*Clonia*) *wahlbergi* Stål; (5) *Clonia* (*Leptoclonia*) *vittata* Thunberg.

1.1. Subgenus *Clonia* Stål 1855

Key to the males of the subgenus *Clonia* Stål

1. Fore wings 6,5–9,0 times the length of the pronotum; if somewhat shorter, the fore and middle femora armed below with 9–11 spines on each margin 2

— Fore wings 6,3 times the length of the pronotum at most.. 8

2. Mean value of the number of spines on one row of the fore and middle femora at least 7,9 3

— Mean value of the number of spines on one row of fore and middle femora at most 7,6 4

3. Pronotal disc without black spots on the base (rarely with two narrow brownish stripes). Lower margin of the lateral lobes of pronotum frequently with a broad white, yellowish or light-green fascia. Mean value of the number of spines on one row of the fore and middle femora 0,9–10,6 .. .. 1.1.1. **multispina** Uvarov

— Pronotal disc with two shiny black spots on the base. Lower margin of the lateral lobes of pronotum without a light fascia (seldom slightly brightened). Mean value of the number of spines on one row of the fore and middle femora 7,9–9,8 1.1.2. **zernyi** Kaltenbach

4. Lower margin of the lateral lobes of pronotum without a light fascia (seldom slightly brightened) 5

— Lower margin of the lateral lobes of pronotum with a broad white, yellowish or light-green fascia 6

5. Length of the hind femur 42,0–52,5 mm. A large and rather robust species 1.1.3. **wahlbergi** Stål

— Length of the hind femur 34,5–38,0 mm. A small and more slender species 1.1.4. **saussurei** Kaltenbach

6. Medial expansion of cercus reaching the half or extending a little beyond the half of its length (figs 16–19). Femur of fore legs below usually with 7 external spines 7

— Medial expansion of cercus reaching the subapical part (figs 20, 21). Fore wings 6,5–8,5 times the length of pronotum. Femur of fore legs below usually with 8 external spines .. .. 1.1.7. **caudata** Uvarov

7. Medial expansion of cercus extending beyond the half of its length (figs 16, 17) 1.1.5. **intermedia** Kaltenbach

— Medial expansion of cercus reaching the half of its length (figs 18, 19) 1.1.6. **kalahariensis** Kaltenbach

8. Cercus with a distinct medial expansion (figs 22–25, 27, 28) 9

— Cercus gradually narrowed medially, without a distinctly prominent expansion (fig. 26). Fore wings 4–5 times the length of pronotum .. .. 1.1.10. **burri** Uvarov

9. Medial expansion of cercus reaching the half of its length (figs 24, 25). Fore wings 4,8–5,2 times the length of pronotum .. .. .. 1.1.9. **dewittei** Kaltenbach

— Medial expansion of cercus extending beyond the half of its length (figs 22, 23, 27, 28) 10

10. Fore wings 5,8–6,3 times the length of pronotum. Medial expansion of cercus extending a little beyond the half of its length (figs 22, 23) .. .. 1.1.8. **uvarovi** Kaltenbach

— Fore wings about twice the length of pronotum 11

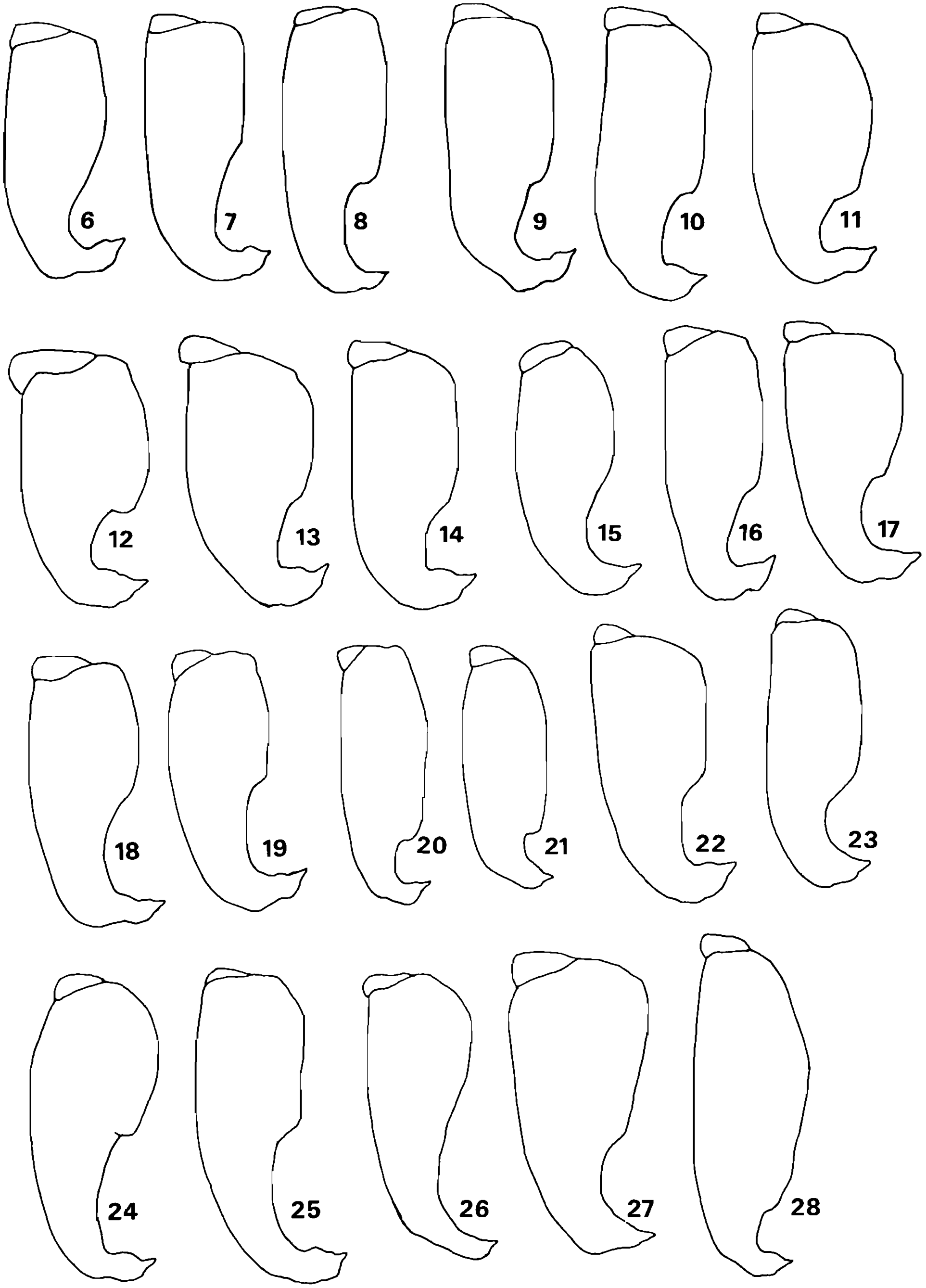
11. Medial expansion of cercus extending a little beyond the half of its length (fig. 27) 1.1.12. **kenyana** Uvarov

— Medial expansion of cercus reaching the subapical part (fig. 28) 1.1.13. **angolana** Kaltenbach

Key to the females of the subgenus *Clonia* Stål

1. Subgenital plate apically with narrow or shallowly rounded excision (figs 29–34, 36–39) 2

— Subgenital plate apically with broad, angular excision (fig. 35). Fore wings 5,3–7,0 times the length of pronotum.. .. .. 1.1.7. **caudata** Uvarov



Figs. 6–28. Left cercus of the ♂♂ of *Clonia* (subgen. *Clonia*): (6–8) *multispina* Uvarov; (9–11) *zernyi* Kaltenbach; (12–14) *wahlbergi* Stal; (15) *saussurei* Kaltenbach; (16–17) *intermedia* Kaltenbach; (18–19) *kalahariensis* Kaltenbach; (20–21) *caudata* Uvarov; (22–23) *uvarovi* Kaltenbach; (24–25) *dewittei* Kaltenbach; (26) *burri* Uvarov; (27) *kenyana* Uvarov; (28) *angolana* Uvarov.

2. Fore wings 6,0–8,5 times the length of pronotum; if somewhat shorter, the fore and middle femur armed below with 9–11 spines on each row 3

— Fore wings 3,8–5,5 times the length of pronotum; fore and middle femur armed below with 6–8 spines on each row 8

3. Mean value of the number of spines on the fore and middle femur at least 7,9 for one row 4

— Mean value of the number of spines on the fore and middle femur at most 7,6 for one row 5

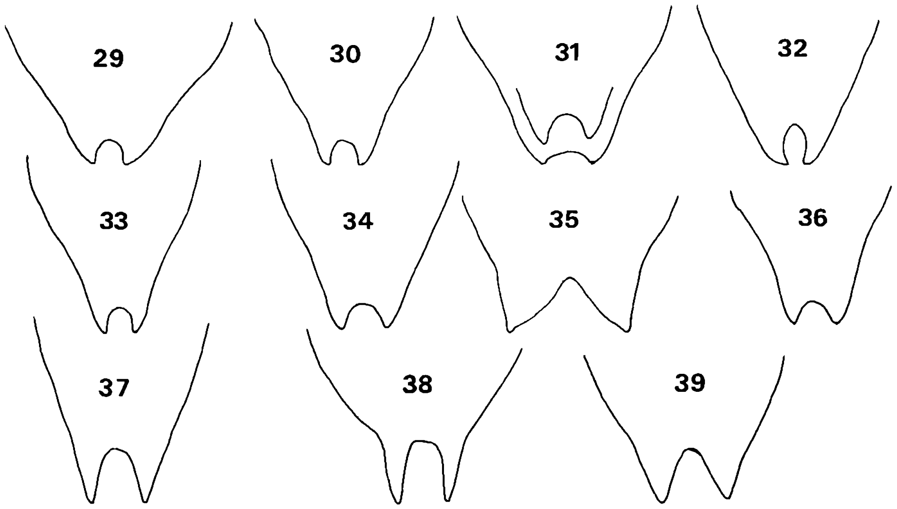
4. Pronotal disc without black spots on the base (rarely with two narrow brownish stripes). Lower margin of the lateral lobes of pronotum frequently with a broad white, yellowish or light-green fascia. Mean value of the number of spines on one row of the fore and middle femora 9,0–10,6 .. .. 1.1.1. **multispina** Uvarov

— Pronotal disc with two shiny black spots on the base. Lower margin of the lateral lobes of pronotum without a light fascia (seldom slightly brightened). Mean value of the number of spines on one row of the fore and middle femora 7,9–9,8 1.1.2. **zernyi** Kaltenbach

5. Lower margin of the lateral lobes of pronotum without a light fascia (seldom slightly brightened) 6

— Lower margin of the lateral lobes of pronotum with a broad white, yellowish or light-green fascia 7

6. Length of hind femur 42,0–55,5 mm. Subgenital plate apically with a shallow round excision (fig. 31); a large, rather robust species .. .. 1.1.3. **wahlbergi** Stål



Figs. 29–39. Subgenital plate of the ♀♀ of *Clonia* (subgen. *Clonia*): (29) *multispina* Uvarov; (30) *zernyi* Kaltenbach; (31) *wahlbergi* Stål; (32) *saussurei* Kaltenbach; (33) *intermedia* Kaltenbach; (34) *kalahariensis* Kaltenbach; (35) *caudata* Uvarov; (36) *uvarovi* Kaltenbach; (37) *dewittei* Kaltenbach; (38) *burri* Uvarov; (39) *jagoi* Kaltenbach.

— Length of hind femur at most 39,0 mm. Subgenital plate apically with deeper rounded excision (fig. 32); a rather small and more slender species
1.1.4. **saussurei** Kaltenbach
7. Ovipositor less than 4 times the length of pronotum 1.1.5. **intermedia** Kaltenbach
— Ovipositor very slender, more than 4 times the length of pronotum
1.1.6. **kalahariensis** Kaltenbach
8. Lower margin of the lateral lobes of pronotum without a light fascia (seldom slightly brightened) 9
— Lower margin of the lateral lobes of pronotum with a rather broad light fascia
1.1.11. **jagoi** Kaltenbach
9. Subgenital plate with a shallow rounded excision on the apex (fig. 36)
1.1.8. **uvarovi** Kaltenbach
— Subgenital plate with a deep rounded excision on the apex (figs 37, 38) .. 10
10. Ovipositor less than 3,5 times the length of pronotum .. 1.1.9. **dewittei** Kaltenbach
— Ovipositor at least 3,5 times the length of pronotum .. 1.1.10. **burri** Uvarov

1.2. Subgenus *Leptoclonia* Kaltenbach 1971

Key to the males of the subgenus *Leptoclonia* Kaltenbach

1. Fore wings 3,5–8,5 times the length of pronotum. Cercus with a medial expansion, reaching the subapical part (figs 40–44) 2
— Fore wings 2,0–3,0 times the length of pronotum. Cercus distally gradually narrowed, without a distinctly prominent medial expansion (fig. 45).. .. 1.2.3. **minuta** Haan
2. Cercus slender, medial expansion with a straight or slightly concave edge (figs 40–42)
1.2.1. **vittata** Thunberg
— Cercus stout, medial expansion with a convex edge (figs 43, 44)
1.2.2. **vansoni** Kaltenbach

Key to the females of the subgenus *Leptoclonia* Kaltenbach

1. Fore wings 3,5–8,0 times the length of pronotum 2
— Fore wings 2,0–3,0 times the length of pronotum .. .. .. 1.2.3. **minuta** Haan
2. Subgenital plate with pointed lobes (fig. 54) .. .. 1.2.1. **vittata** Thunberg
— Subgenital plate with rounded lobes (fig. 55) .. .. 1.2.2. **vansoni** Kaltenbach

1.3. Subgenus *Xanthoclonia* Kaltenbach 1971

1.3.1. **tessellata** Saussure

1.4. Subgenus *Hemiclonia* Kirby 1906

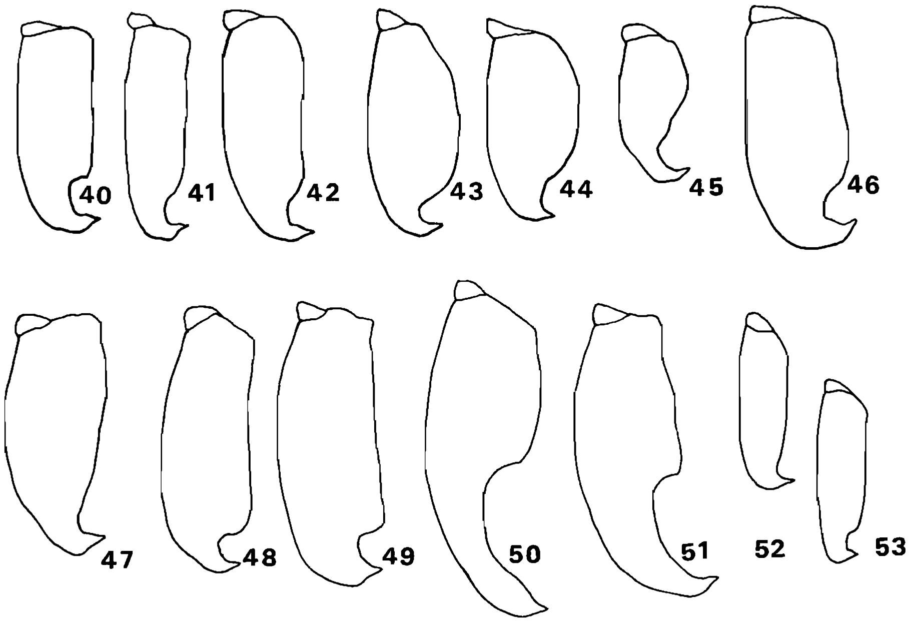
Key to the males of the subgenus *Hemiclonia* Kirby

1. Hind corner of paranota rounded (fig. 62). Hind wings longer than fore wings. Cercus distally gradually narrowed, mostly with a convex medial edge (fig. 47). A large, very robust species .. .. 1.4.1. **melanoptera** Linné
— Hind corner of paranota extending in a pointed tip (fig. 63). Hind wings not reaching the apex of fore wings 2
2. Length of pronotum 8,0–10,5 mm; larger, robust species. Cercus with a medial expansion (figs 48–51) 3

— Length of pronotum 6,0–6,5 mm; a small and less robust species. Cercus: figs 52, 53
1.4.4. **charpentieri** Kaltenbach

3. Medial expansion of cercus reaching the subapical part (figs 48, 49)
1.4.2. **lalandei** Saussure

— Medial expansion of cercus extending a little beyond the half of its length (figs 50, 51)
1.4.3. **assimilis** Kaltenbach



Figs 40–53. Left cercus of the ♂♂ of *Clonia* (subgen. *Leptoclonia*): (40–42) *vittata* Thunberg; (43–44) *vansoni* Kaltenbach; (45) *minuta* Haan.—(subgen. *Xanthoclonia*): (46) *tessellata* Saussure.—(subgen. *Hemiclonia*): (47) *melanoptera* Linné; (48–49) *lalandei* Saussure; (50–51) *assimilis* Kaltenbach; (52–53) *charpentieri* Kaltenbach.

Key to the females of the subgenus *Hemiclonia* Kirby

1. Hind corner of paranota rounded (fig. 62). Hind wings longer than fore wings
1.4.1. **melanoptera** Linné

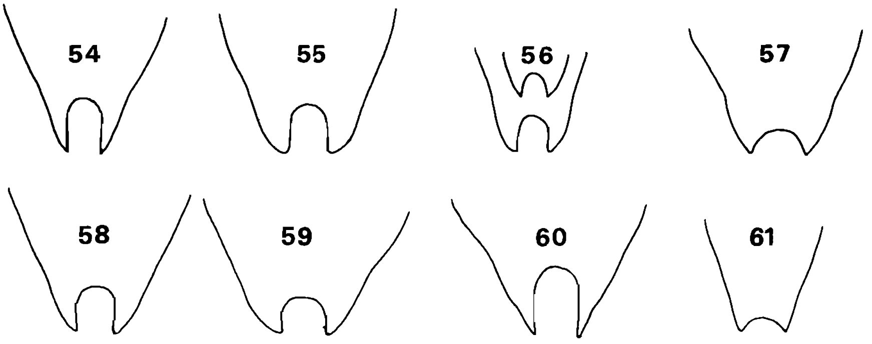
— Hind corner of paranota extending in a pointed tip (fig. 63). Hind wings not reaching the apex of fore wings 2

2. Length of pronotum 8,0–10,5 mm; larger, robust species. Fore wings elongate 3

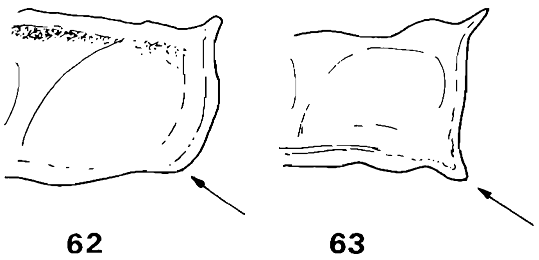
— Length of pronotum 6,0–7,0 mm; a small and less robust species. Fore wings elliptical. Subgenital plate with a shallow excision on the apex (fig. 61)
1.4.4. **charpentieri** Kaltenbach

3. Subgenital plate on the apex not very deeply excised; lobes short (fig. 59)
1.4.2. **lalandei** Saussure

— Subgenital plate with a deeply excised apex; lobes long and distinctly pointed (fig. 60)
1.4.3. **assimilis** Kaltenbach



Figs 54–61. Subgenital plate of the ♀♀ of *Clonia* (subgen. *Leptoclonia*): (54) *vittata* Thunberg; (55) *vansoni* Kaltenbach; (56) *minuta* Haan.—(subgen. *Xanthoclonia*): (57) *tessellata* Saussure.—(subgen. *Hemiclonia*): (58) *melanoptera* Linné; (59) *lalandei* Saussure; (60) *assimilis* Kaltenbach; (61) *charpentieri* Kaltenbach.



Figs 62–63. Pronotum (lateral view) of (62) *Clonia* (*Hemiclonia*) *melanoptera* Linné; (63) *Clonia* (*Hemiclonia*) *assimilis* Kaltenbach.

2. Genus *Cloniella* Kaltenbach 1971

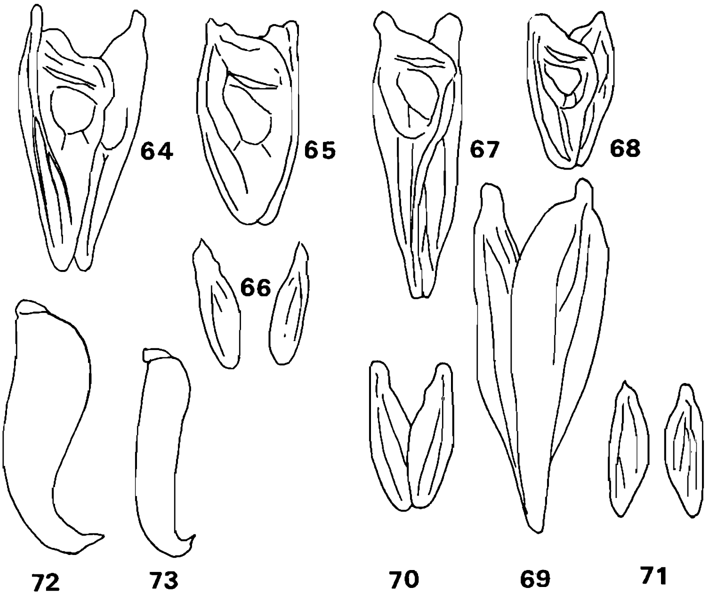
Key to the males of *Cloniella* Kaltenbach

1. Distal part of fore wings elongate, with a narrowed apex (fig. 64). Lateral border of cercus curved inwards after the 2nd third (fig. 72) .. 2.1. **zambesica** Kaltenbach
— Distal part of fore wings short, with a rounded apex (fig. 65). Lateral border of cercus straight; only just before the apex curved inwards (fig. 73) 2.2. **praedatoria** Distant

3. Genus *Peringueyella* Saussure

Key to the males of *Peringueyella* Saussure

1. Apical lobe of fore wings strongly narrowed and longer than the stridulatory area (fig. 67) .. .. 3.1. **macrocephala** Schaum
— Apical lobe of fore wings broadly rounded and shorter than the stridulatory area (fig. 68) 2
2. Vertex in front of the eyes 1,6–2,5 times the length of the diameter of eye (compare fig. 3) .. .. 3.2. **jocosa** Saussure



Figs 64–71. Fore wings of *Cloniella* and *Peringueyella*. *Cloniella*: (64) *zambesica* Kaltenbach (♂); (65) *praedatoria* Distant (♂); (66) *praedatoria* Distant (♀).—*Peringueyella*: (67) *macrocephala* Schaum (♂); (68) *jocosa* Saussure (♂); (69) *macrocephala* Schaum (♀); (70) *jocosa* Saussure (♀); (71) *zulu* Kaltenbach (♀).

Figs 72–73. Left cercus of the ♂♂ of *Cloniella*: (72) *zambesica* Kaltenbach; (73) *praedatoria* Distant.

— Vertex in front of the eyes 1,4–1,6 times the length of the diameter of eye (compare fig. 3) .. .. 3.3. **zulu** Kaltenbach

Key to the females of *Peringueyella* Saussure

1. Wings strongly abbreviated; fore wings at least as long as the pronotum (fig. 69) 3.1. **macrocephala** Schaum

— Wings rudimentary (lobiform); fore wings distinctly shorter than the pronotum (figs 70, 71) 2

2. Fore wings distally overlapping (fig. 70) .. .. .. 3.2. **jocosa** Saussure

— Fore wings distally not overlapping (fig. 71) .. .. 3.3. **zulu** Kaltenbach

1. *Clonia* Stål 1855

1.1. Subgenus *Clonia* Stål 1855

1.1.1. *Clonia* (*Clonia*) *multispina* Uvarov

Clonia multispina Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 59, 62. (Part.)

Figures: 6–8, 29, 74.

Measurements (in mm): Length of body: ♂ 45,0–58,0, ♀ 45,0–62,0; length of pronotum:

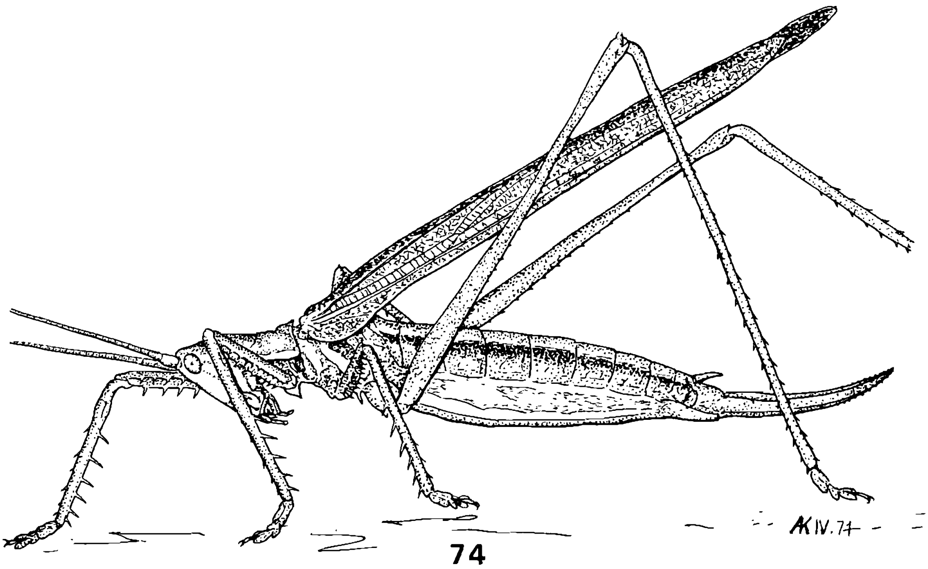


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Fig. 74. *Clonia* (*Clonia*) *multispina* Uvarov, ♀ (figured after a living specimen).

♂ 7,1–9,5, ♀ 8,0–9,6; length of ovipositor: 21,2–30,2.

Distribution: Republic of the Congo: Katanga; N. and W. Tanzania; Zambia.

1.1.2. *Clonia* (*Clonia*) *zernyi* Kaltenbach

Clonia (*Clonia*) *zernyi* Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 434–435.
Clonia multispina Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 59, 62. (Part.)

Figures: 9–11, 30.

Measurements (in mm): Length of body: ♂ 45,0–61,0, ♀ 54,0–66,0; length of pronotum: ♂ 7,1–9,0, ♀ 8,2–10,0; length of ovipositor: 24,6–31,0.

Distribution: E. and S. Tanzania; Malawi.

1.1.3. *Clonia* (*Clonia*) *wahlbergi* Stål

Clonia Wahlbergi Stål, 1855, *Oefv. Sven. Vet.-Akad. Förh.* **12**: 352.
? *Saga maculosa* Walker, 1869, *Cat. Derm. Salt. Brit. Mus.* **2**: 294.
Clonia maculosa, Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 57–58. (Part.)
Clonia vittata auct. (nec *Locusta vittata* Thunberg 1789).

Figures: 4, 12–14, 31.

Measurements (in mm): Length of body: ♂ 42,0–56,5, ♀ 48,0–65,0; length of pronotum: ♂ 7,2–9,0, ♀ 8,1–10,2; length of ovipositor: 24,5–36,2.

Note: The synonyms *maculosa* Walker and *maculosa* Uvarov refer to the new subspecies *wahlbergi variabilis* Kaltenbach, described in *Beitr. Ent. Berlin* **21** (1971).

Distribution: Moçambique; Rhodesia; Republic of South Africa; N. and E. South West Africa.

1.1.4. *Clonia (Clonia) saussurei* Kaltenbach

Clonia (Clonia) saussurei Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 425, 438.

Figures: 15, 32.

Measurements (in mm): Length of body: ♂ 37,0–41,0, ♀ 44,0; length of pronotum: ♂ 6,2–6,8, ♀ 7,0; length of ovipositor: 26,0.

Distribution: E. South Africa.

1.1.5. *Clonia (Clonia) intermedia* Kaltenbach

Clonia (Clonia) intermedia Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 425, 438–439.

Figures: 16, 17, 33.

Measurements (in mm): Length of body: ♂ 45,0–56,0, ♀ 52,0; length of pronotum: ♂ 7,0–8,5, ♀ 8,3; length of ovipositor: 22,5.

Distribution: Angola; S. Zambia.

1.1.6. *Clonia (Clonia) kalahariensis* Kaltenbach

Clonia (Clonia) kalahariensis Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 425, 439.

Figures: 18, 19, 34.

Measurements (in mm): Length of body: ♂ 40,0–51,0, ♀ 52,0; length of pronotum: ♂ 6,6–8,0, ♀ 8,0–8,1; length of ovipositor: 34,5–36,3.

Distribution: Botswana; Republic of South Africa: Bechuanaland, W. Orange Free State.

1.1.7. *Clonia (Clonia) caudata* Uvarov

Clonia caudata Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 58–59, 61, 62.

Figures: 20, 21, 35.

Measurements (in mm): Length of body: ♂ 40,0–50,2, ♀ 48,0–59,0; length of pronotum: ♂ 6,5–8,0, ♀ 7,7–9,2; length of ovipositor: 26,0–35,0.

Distribution: Angola; South West Africa.

1.1.8. *Clonia (Clonia) uvarovi* Kaltenbach

Clonia (Clonia) uvarovi Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 425, 440–441.
Clonia maculosa, Uvarov, 1942 (nec *Saga maculosa* Walker 1869), *Proc. R. Ent. Soc. London* (B) **11**/4: 57–58, 61, 62 (Part.)

Figures: 22, 23, 36.

Measurements (in mm): Length of body: ♂ 45,0–52,0, ♀ 47,2–56,6; length of pronotum: ♂ 7,5–8,5, ♀ 7,8–9,8; length of ovipositor: 23,5–28,0.

Distribution: Republic of South Africa: Transvaal.

1.1.9. *Clonia (Clonia) dewittei* Kaltenbach

Clonia (Clonia) dewittei Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 427, 441.

Figures: 24, 25, 37.

Measurements (in mm): Length of body: ♂ 46,0–49,0, ♀ 51,0–53,0; length of pronotum: ♂ 8,5, ♀ 9,7–10,0; length of ovipositor: 26,0–26,2.

Distribution: Republic of Congo: Katanga.

1.1.10. *Clonia* (*Clonia*) *burri* Uvarov

Clonia burri Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 59–60, 62.

Figures: 26, 38.

Measurements (in mm): Length of body: ♂ 42,0–49,0, ♀4 7,5–53,0; length of pronotum: ♂ 7,0–8,0, ♀ 8,0–8,6; length of ovipositor: 28,0–34,0.

Distribution: E. Angola.

1.1.11. *Clonia* (*Clonia*) *jagoi* Kaltenbach

Clonia (*Clonia*) *jagoi* Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 425, 443.

Figure: 39.

Measurements (in mm): ♀ (♂ unknown): Length of body: 57,0; length of pronotum: 9,1; length of ovipositor: 27,0.

Distribution: W. Tanzania (Ufipa plateau).

1.1.12. *Clonia* (*Clonia*) *kenyana* Uvarov

Clonia kenyana Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 60, 62.

Figure: 27.

Measurements (in mm): ♂ (adult ♀ unknown): Length of body: 48,0–54,2; length of pronotum: 9,5–9,6.

Distribution: E. Kenya.

1.1.13. *Clonia* (*Clonia*) *angolana* Kaltenbach

Clonia (*Clonia*) *angolana* Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 423, 445.

Figure: 28.

Measurements (in mm): ♂ (♀ unknown): Length of body: 56,0; length of pronotum: 9,6.

Distribution: Angola: Moçamedes.

1.2. Subgenus *Leptoclonia* Kaltenbach 1971

1.2.1. *Clonia* (*Leptoclonia*) *vittata* (Thunberg)

Locusta vittata Thunberg, 1789, *Nov. Spec. Ins.* **5**: 102.
Clonia turneri Uvarov, 1942, *Proc. R. Ent. Soc. London* (B) **11**/4: 60–61, 62.

Figures: 5, 40–42, 54.

Measurements (in mm): Length of body: ♂ 31,0–38,0, ♀ 38,0–47,5; length of pronotum: ♂ 4,6–6,0, ♀ 6,0–7,8; length of ovipositor: 22,6–31,0.

Distribution: Republic of South Africa: Cape Province; South West Africa.

1.2.2. *Clonia* (*Leptoclonia*) *vansoni* Kaltenbach

Clonia (*Leptoclonia*) *vansoni* Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 427, 448.

Figures: 43, 44, 55.

Measurements (in mm): Length of body: ♂ 32,0–38,0, ♀ 33,0–36,0; length of pronotum: ♂ 4,5–5,8, ♀ 5,2–6,0; length of ovipositor: 20,6–21,6.

Distribution: Western parts of Cape Province.

1.2.3. *Clonia* (*Leptoclonia*) *minuta* Haan

Locusta (*Saga*) *minuta* Haan, 1842, *Bijdr. Kenn. Orth.*, p. 209.

Figures: 45, 56.

Measurements (in mm): Length of body: ♂ 27,0–31,0, ♀ 23,0–38,2; length of pronotum: ♂ 4,0–4,4, ♀ 4,5–6,0; length of ovipositor: 16,0–25,0.

Distribution: Western parts of Cape Province.

1.3. Subgenus *Xanthoclonia* Kaltenbach 1971

1.3.1. *Clonia* (*Xanthoclonia*) *tessellata* Saussure

Clonia tessellata Saussure, 1888, *Ann. Soc. ent. France* (6)**8**: 143–144.

Figures: 46, 57.

Measurements (in mm): Length of body: ♂ 32,5–40,0, ♀ 42,0–52,0; length of pronotum: ♂ 6,0–7,6, ♀ 7,5–8,8; length of ovipositor: 23,0–32,2.

Distribution: Cape Province; Transvaal.

1.4. Subgenus *Hemiclonia* Kirby 1906

1.4.1. *Clonia* (*Hemiclonia*) *melanoptera* (Linné)

Gryllus Tettigonia melanopterus Linné, 1758, *Systema Naturae* (ed. 10) **1**: 430, no. 34.

Figures: 47, 58, 62.

Measurements (in mm): Length of body: ♂ 47,0–66,0, ♀ 52,5–73,0; length of pronotum: ♂ 9,2–13,0, ♀ 10,6–15,5; length of ovipositor: 38,5–50,2.

Distribution: Western parts of Cape Province.

1.4.2. *Clonia* (*Hemiclonia*) *lalandei* Saussure (Blanchard i. 1.)

Clonia lalandei Saussure, 1888, *Ann. Soc. Ent. France* (6)**8**: 142–143 (♀).

Figures: 48, 49, 59.

Measurements (in mm): Length of body: ♂ 45,0–52,0, ♀ 42,0–54,5; length of pronotum: ♂ 8,0–10,5, ♀ 9,0–9,6; length of ovipositor: 27,0–33,0.

Distribution: Transvaal; Natal; Transkei.

1.4.3. *Clonia* (*Hemiclonia*) *assimilis* Kaltenbach

Clonia (*Hemiclonia*) *assimilis* Kaltenbach, 1971 *Beitr. Ent. Berlin* **21**: 428, 454.
Clonia lalandei Saussure, 1892, *Ann. Soc. Ent. France* **61**: 15 (♂).

Figures: 50, 51, 60, 63.

Measurements (in mm): Length of body: ♂ 48,0–51,0, ♀ 48,5–60,0; length of pronotum: ♂ 8,6–9,0; ♀ 8,1–10,5; length of ovipositor: 27,5–35,0.

Distribution: Botswana; Republic of South Africa: Natal.

1.4.4. *Clonia* (*Hemiclonia*) *charpentieri* Kaltenbach

Clonia (*Hemiclonia*) *charpentieri* Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 428, 454–455.

Figures: 52, 53, 61.

Measurements (in mm): Length of body: ♂ 30,0–32,0, ♀ 35,2–37,0; length of pronotum: ♂ 6,0–6,5, ♀ 6,5; length of ovipositor: 22,8–24,8.

Distribution: Natal; South Africa without precise indication of locality.

2. Genus *Cloniella* Kaltenbach 1971

2.1. *Cloniella zambesica* Kaltenbach

Cloniella zambesica Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 429, 455.

Figures: 64, 72.

Measurements (in mm): ♂ (♀ unknown): Length of body: 45,0; length of pronotum: 7,0.

Distribution: Zambia.

2.2. *Cloniella praedatoria* (Distant)

Hemisaga praedatoria Distant, 1892, *Nat. Transvaal*, p. 65, 258–259.
Peringueyella praeditoria (err. impr.), Kirby, 1906, *Syn. Cat. Orth.* **2**: 227.

Figures: 65, 66, 73.

Measurements (in mm): Length of body: ♂ 39,0, ♀ 49,0; length of pronotum: ♂ 5,8, ♀ 7,5; length of ovipositor: 29,0.

Distribution: Transvaal.

3. Genus *Peringueyella* Saussure 1888

3.1. *Peringueyella macrocephala* Schaum

Saga macrocephala Schaum, 1853, *Monatsber. Verh. Akad. Wiss. Berlin* **1853**: 778.

Figures: 67, 69.

Measurements (in mm): Length of body: ♂ 60,0–61,0, ♀ 76,0–80,0; length of pronotum: ♂ 8,1–8,5, ♀ 10,0–11,6; length of ovipositor: 20,6–25,0.

Distribution: N. Moçambique; Rhodesia.

3.2. *Peringueyella jocosa* Saussure

Peringueyella jocosa Saussure, 1888, *Ann. Soc. Ent. France* (6)**8**: 152–153.

Figures: 68, 70.

Measurements (in mm): Length of body: ♂ 50,2–66,0, ♀ 59,0–73,0; length of pronotum: ♂ 6,2–8,2, ♀ 7,5–9,4; length of ovipositor: 20,5–31,2.

Note: The subspecies *jocosa multispina* Kaltenbach (Beitr. Ent. Berlin **21**: 458) differs from the nominate race by a higher number of spines on the tibiae of fore and middle legs. Its range joins that of *jocosa jocosa* to the west and south.

Distribution: Moçambique; Rhodesia; Republic of South Africa: Transvaal, Orange Free State, Natal; Botswana.

3.3. *Peringueyella zulu* Kaltenbach

Peringueyella zulu Kaltenbach, 1971, *Beitr. Ent. Berlin* **21**: 429, 460.

Figure: 71.

Measurements (in mm): Length of body: ♂ 53,0–54,0; ♀ 55,0–60,0; length of pronotum: ♂ 6,6–7,0, ♀ 7,2–8,2; length of ovipositor: 17,5–21,5.

Distribution: Natal (Zululand).

Attention: All species of Saginae show a considerable variation in size. The measurements given above refer to the specimens examined by the author and are therefore only approximate values in regard to the real range of size!

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